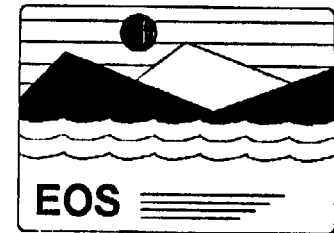




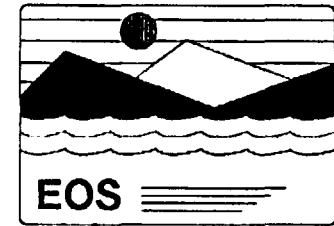
BRIEF STATUS SUMMARY



- VERY SUCCESSFUL CRITICAL DESIGN REVIEW COMPLETED, JANUARY 18 - 22, 1994
- SINCE 1992 PDR: MASS & DATA RATE STABLE; POWER DECREASED; ALL IN SPEC
- ALL MAJOR SUBCONTRACTS PLACED
- MAJOR PROTOFLIGHT MODEL PROCUREMENTS UNDERWAY
- ENGINEERING MODEL FABRICATION IN PROGRESS
- RISK MITIGATION ACTIONS IN PROGRESS: BEARING TESTS; 2nd ROIC VENDOR
- SCHEDULE DELAYS BEING CORRECTED; AM PROGRAM HAS NINE MONTHS SLACK
- SBRC EXPERIENCING CONTRACT COST GROWTH
NASA HEADQUARTERS REVIEWING THE PROGRAM
- SBRC WILL SUBMIT A COST AND SCHEDULE REPLAN IN MAY
- FOCUS SHIFTING FROM REQUIREMENTS TRACING/DEVELOPMENT
TO PERFORMANCE VERIFICATION AND TESTING



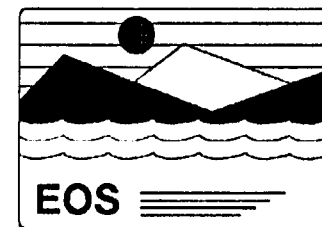
TECHNICAL PERFORMANCE IS SOLID



-
- **CALIBRATION** **CALIBRATION FACILITY IN DEVELOPMENT**
 - **PERFORMANCE** **POSITIVE MARGINS ANTICIPATED FOR FLIGHT UNITS**
 - **MATH MODELS** **PERFORMANCE/STRUCTURAL/THERMAL MODELS COMPLETE**
 - **OPTICS** **DESIGN FINALIZED, INCLUDING GHOSTING FIXES**
 - **DETECTORS** **REQUIRED PERFORMANCE DEMONSTRATED**
 INDIUM BUMP ISSUE OPEN
 READOUT INTEGRATED CIRCUIT ISSUE NEARLY RESOLVED
 - **ELECTRONICS** **ALL BREADBOARDS COMPLETED, EM BOARDS IN FABRICATION**
 - **STRUCT/MECH** **ALL HARDWARE DESIGNS COMPLETE; MANY EM PIECES RCVD**
 STRUCTURAL MODEL TO BE VIBRATED IN JULY
 - **GSE** **ALL REQTS SPECIFIED; STE#1 ON SCHEDULE FOR JUNE 94**
 - **SYSTEM I&T** **INITIAL PLANS & PROCEDURES COMPLETE; EM I&T INITIATED**



PROJECTED COST OVERRUN ACTIVELY ADDRESSED BY BOTH AM PROJECT AND SBRC



- DESCOPE ACTIONS HAVE BEEN IMPLEMENTED TO CONTROL COSTS
MORE DESCOPIES UNDER CONSIDERATION
- AM PROJECT HAS ASKED SBRC TO DEVELOP A COST REDUCTION AND COST CONTROL PLAN
AM PROJECT GUIDANCE TO SBRC "INSURE THAT PROPOSAL WILL STAND THE TEST OF TIME",
I.E., A REALISTIC, SOUND, JUSTIFIABLE PROPOSAL
SBRC WILL SUBMIT THEIR OVERRUN PROPOSAL IN MAY 1994
- AM PROJECT AND SCIENCE MUST ADD NO NEW CAPABILITIES OR REQUIREMENTS
- AM PROJECT AND SCIENCE CONTINUE TO EXPLORE FALLBACK POSITIONS/DESCOPIES
- AT REQUEST OF AM PROJECT, MR. VILLONE, GSFC COMPTROLLER'S OFFICE, CONDUCTED AN
AUDIT OF MODIS ON 18 - 22 APRIL 1994 -- SBRC PROJECTIONS VALIDATED

Head Count 220 ^{150 = now} → 110

Best inst term



PAST AND FUTURE COST CONTAINMENT ACTIONS SAVE \$22M



● ACTIONS IMPLEMENTED PRE-CDR ~ \$12M

SBRC INITIATED

DELETED ROTATION TABLE IN THERMAL VACUUM CHAMBER, \$2.0M	DECEMBER 1992
DELETED SECOND GROUND-BASED CALIBRATOR, \$1.6M	FEBRUARY 1993
DELETED COOLED SDSM DETECTORS, \$400k	FEBRUARY 1993
RATE REDUCTION IN FY93 OF \$2.0M	OCTOBER 1993
REVISED INTEGRATION & TEST TEAM APPROACH (WAS 4 TEAMS, NOW 2.1), \$2.9M	DECEMBER 1993

GSFC/SBRC JOINT

DELETED THERMAL ASPECTS OF STRUCTURAL-THERMAL MODEL, \$450k	JULY 1992
ALLOWED 2 DEAD PIXELS PER FOCAL PLANE	
RELAXED REGISTRATION TO 0.2 IFOV (WITH 0.1 GOAL) \ \$230k	NOVEMBER 1992
ELIMINATED BENCH CHECK UNIT, \$450k	JANUARY 1993
REDUCED PROBABILITY OF 5-YEAR SUCCESS REQ'T TO 0.85 (SELECTED GRADE B PARTS), \$1.2M	MARCH 1993
REUSED STRUCTURAL MODEL MAINFRAME FOR ENGINEERING MODEL, \$600k	MARCH 1993
DELETED STIMULUS INTERFACE CONTROLLER OF STE#2, \$356k	MAY 1993

● CONTEMPLATED FUTURE ACTIONS ~ \$10M

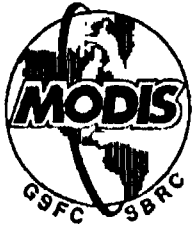
SBRC INITIATED

DELETE MOISTURE MONITORING OF GRAPHITE-EPOXY STRUCTURE, \$100k

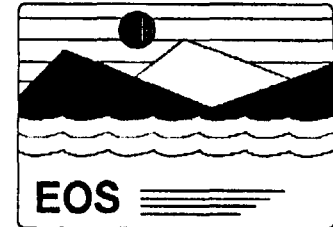
GSFC/SBRC JOINT

DELETE ON-BOARD CALIBRATORS & DOORS FROM ENGINEERING MODEL, \$1.8M
USE PORTIONS OF THE EM FOR PFM: MAINFRAME, COOLER, SCAN MIRROR, not ELEX, \$4.0M
SCALE BACK SPARES APPROACH, DELETING MANY BUILT UP ASSEMBLIES, \$4.0M
MAGNETIC TESTS ON EM ONLY, \$100k

● ALL SBRC CHANGE PROPOSAL COSTS HAVE BEEN RESPONSIBLE AND REASONABLE



TOP CONCERNS



- **PERFORMANCE WITHIN COST AND SCHEDULE**
RECEIVING CONTINUOUS ATTENTION; DESCOPIES; REPLAN
- **PLESSY 1750A MICROPROCESSOR PERFORMANCE NOT AS CLAIMED**
SBRC VISITED PLESSY RECENTLY, EXPECTS TO SEND REP FOR EXTENDED TESTS
- **HgCdTe PV DETECTOR OPERABILITY (INDIUM BUMP CONNECTIONS)**
POSSIBLE FIXES INCLUDE SUBDIVIDING SENSOR CHIP ASSEMBLY OR LONGER INDIUM BUMPS
- **SCAN MIRROR BEARING LIFE**
BEARING AND LUBRICANT TESTS RUNNING NOW
- **FPA READOUT INTEGRATED CIRCUITS; HUGHES CARLSBAD IS CLOSING IN 1994**
MONITORING HUGHES CARLSBAD CLOSELY; SECOND SOURCE; REPORTS FAVORABLE
- **SPECTRAL BAND REGISTRATION**
ANALYSIS CONTINUES; TESTING TIED TO ANALYSIS
- **RADIATIVE COOLER TEMPERATURE MARGIN**
ANALYSIS & TEST; HAVE IDENTIFIED MODIFICATION IF NEEDED
- **HgCdTe PC DETECTOR PERFORMANCE (CROSSTALK)**
MORE ACCURATE MEASUREMENTS, WAIVER ANTICIPATED
- **OPTICAL BACKSCATTER (GHOSTING) AND SCATTERED LIGHT**
REDESIGNED REFRACTIVE OPTICS FOR GHOSTING; STUDYING SCATTER OFF SCAN MIRROR